



# Bureau of the Environment 2007 Outreach Initiatives

James H. Fyke, Commissioner  
Paul Sloan, Deputy Commissioner



## COMMISSIONER JAMES H. FYKE



We are fortunate to call Tennessee home and to share in the outstanding quality of life that makes our state special. However, our ability to sustain Tennessee's high quality of life is directly linked to the health of our communities and our environment. If we don't have clean air, we can't enjoy the beautiful vistas we have from either the Appalachian highlands or the bluffs overlooking the Mississippi. If we don't have clean water, we can't enjoy the recreational opportunities that our scenic waterways offer. If we don't protect the land from pollution, future generations won't have the benefit of all the special places we enjoy in our communities, state parks and natural areas.

Our department has a variety of effective outreach initiatives that engage people and organizations to improve the quality of our state's land, air and water. This report highlights recent results from these priority initiatives. I am proud of the difference

these partnership programs are making for Tennessee. As you read this report, I trust you will see this positive impact too.-

A handwritten signature in black ink that reads "Jim".

## DEPUTY COMMISSIONER PAUL SLOAN

Each year, the Department makes a renewed commitment to educate, support, and assist our citizens. Through the talents, dedication, and commitment of the Bureau of Environment staff, we have helped thousands throughout the state in their environmental stewardship efforts in their businesses, municipal operations, and homes. As a result of the programs and projects like those described in this report, Tennessee is building a community of individuals, businesses, schools and local governments that will help lead Tennessee to a more sustainable future. -

A handwritten signature in black ink that reads "Paul".





## **BUREAU OF ENVIRONMENT STATEMENT OF PURPOSE**

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### **Governor Bredesen's Areas of Environmental Emphasis**

Protecting and Improving our Land, Air and Water

Preserving Open Spaces and Enhancing Local Communities

Forging Public-Private Partnerships to Promote Natural Resource Stewardship

### **Mission**

To safeguard human health and the environment for all Tennesseans by protecting and improving the quality of our land, air and water for present and future generations

### **Vision**

To make Tennessee a national model of environmental stewardship

### **Values**

To serve the public in a timely, fair and consistent manner;

To solve problems through a scientific and evidence-based approach that respects diverse opinions and provides opportunities for input;

To support our people by creating a workplace where employees can achieve their greatest potential.

# AIR, LAND, WATER, ENVIRONMENTAL FIELD OFFICES AND ENVIRONMENTAL ASSISTANCE

Tennessee has made progress on many measures of environmental health. However, better scientific understanding and tougher standards will require greater environmental achievement from all of us – as individuals, communities, businesses, and as regulators.

The outreach initiatives in this report are a critical part of the Department's partnership strategies to keep Tennessee moving forward. These efforts reflect both landmark, pioneer commitments like the Fleming Training Center and responses to emerging environmental challenges like electronics recycling. There are nationally recognized programs like the State Employees Recycling Program and School Chemical Cleanout Campaign and newer partner efforts such as the Healthy Hospitals Campaign. Programs like the Household Hazardous Waste mobile collection service, Used Oil recycling, and the Tennessee Pollution Prevention Partnership continue to benefit Tennessee communities and our environment.

From small businesses to school children, the Department's outreach initiatives are making a positive difference for the quality of our state's land, air, and water.



## **Air Resources**

Tracy Carter, Senior Director  
(615) 532-0127

[www.tn.gov/environment/apc](http://www.tn.gov/environment/apc)



## **Environmental Assistance**

Lori Munkeboe, Senior Director  
(615) 532-0705

[www.tn.gov/environment/ea](http://www.tn.gov/environment/ea)



## **Land Resources**

Chuck Head, Senior Director  
(615) 532-0998

[www.tn.gov/environment/swm](http://www.tn.gov/environment/swm)



## **Environmental Field Offices**

Brenda Apple, Senior Director  
(615) 253-5914

[www.tn.gov/environment/efo](http://www.tn.gov/environment/efo)



## **Water Resources**

David Draughon, Senior Director  
(615) 532-0152

[www.tn.gov/environment/water](http://www.tn.gov/environment/water)



## **Strategic Management**

Elaine Boyd, Senior Director  
(615) 532-0288

[www.tn.gov/environment](http://www.tn.gov/environment)

## CLEAN AIR INITIATIVES

The Air Pollution Control programs focus on protecting and improving Tennessee's air quality. Good air quality is essential for the health of our citizens as well as the sustainability of our economic well-being.

[www.tn.gov/environment/apc](http://www.tn.gov/environment/apc)

(615) 532-0554

TDEC's Clean Air Initiatives increase the public awareness of the impact a local citizen has on air quality and emphasizes each person's ability to improve air quality. The Open Burning Initiative alerts Tennesseans that burning trash outdoors harms the quality of the air we breathe, is unsafe, and very often unnecessary.

Working with various local media outlets and regional clean air partnerships across Tennessee, TDEC has developed and implemented an Air Quality Alert system that alerts residents when air quality becomes unhealthy for sensitive groups. During these times, it is even more important for people to limit those activities that decrease air quality.

Each of us can improve air quality by reducing vehicle emissions through carpooling, using public transportation, organizing errands for efficiency, and keeping vehicles well maintained. Energy conservation also improves air quality. Citizens make a difference when they use Energy Star appliances and compact fluorescent light bulbs, weather proof doors and windows, upgrade home insulation, and purchase Green Power where available.



- Ozone Action Days were emphasized at our May 2007 Clean Air Fair.
- The Department participated in the 2007 Minority Health Month.
- Car Care Night III at the Nashville Sounds provided a showcase for the Clean Air Initiatives.
- A Clean Air Fair in Mt. Juliet, TN reinforced the message to Wilson County residents.
- Staff participated in the April 21st Earth Day at Centennial Park.
- APC provided open burning and/or asbestos information to citizens via public notices in local newspapers across Tennessee.
- Staff informed schools, fire departments, and city and county governments across the state of the environmental hazard of open burning. TDEC was featured at the Tennessee Fire Chiefs' meeting.
- In 2007, **687** people and organizations joined our Air Quality Alert effort and agreed to work to improve air quality by making small changes like carpooling, refueling vehicles after 7:00 p.m., and using gasoline powered lawn mowers on cooler evenings.



## E-CYCLING PROGRAM

[www.tn.gov/environment/swm/ewaste](http://www.tn.gov/environment/swm/ewaste)

**(615) 532-9265**

E-scrap is the term for electronic products that are being replaced and thrown away. They frequently contain toxic materials in their internal components, coatings, and glass.

E-scrap may also contain metals and other materials that can

be hazardous to human health and the environment if they are not properly managed. The EPA reported that 40 percent of the lead in U.S. landfills is from discarded electrical and electronic products. E-scrap also includes personal computers, monitors, televisions, keyboards, printers, telephones, typewriters, gaming platforms, video equipment, calculators, copiers, fax machines, and audio equipment.



- The Mobile HHW Collection Service collected **377,493** pounds of electronic scrap in 2007- a 14 percent increase from 2006.
- TDEC, in partnership with its contractor the Recycling Marketing Cooperative of Tennessee (RMCT), implemented a collection plan with recyclers who provide free statewide collection of e-scrap. Approximately 20 counties participated, collecting e-scrap through one-day collection events or ongoing collection programs.
- In October 2007, 101.5 tons of electronics were recycled from 17 participating counties. This is twice the amount collected in July, August, and September of the same year. If collections continue at this rate, RMCT's vendors will recycle an estimated 1,200 tons of e-scrap in the upcoming year.

## ENVIRONMENTAL COORDINATORS

The Office of Environmental Assistance has four Environmental Coordinators who provide a regional point of contact and offer on-the-ground expertise in all of the Bureau's programs. Environmental Coordinators conduct education and outreach activities, provide general and confidential technical information, assist with multi-permit coordination, and make referrals.

**Vaughn Cassidy, (731) 512-1300**

Supports the Memphis and Jackson Environmental Field Offices.

**Charles Jobe, (615) 687-7000**

Supports the Columbia, Nashville, and Cookeville Environmental Field Offices.

**Mark Penland, (865) 594-6035**

Supports the Chattanooga and Knoxville Environmental Field Offices.

**Jan Compton, (423) 584-5400**

Supports the Johnson City Environmental Field Office and the Department of Energy Oversight Division Office in Oak Ridge.



## ENVIRONMENTAL FIELD OFFICES

TDEC has Environmental Field Offices in eight cities across the state. The Field Offices are staffed with technical personnel representing the Department's regulatory, environmental assistance, and conservation programs. The Field Offices serve as the regional point of contact for citizens with environmental questions or concerns and provide citizens with easy access to TDEC personnel. TDEC has a toll free number (1-888-891-TDEC) and maintains a web site at [www.tn.gov/environment/efo](http://www.tn.gov/environment/efo), which provides information about each Field Office including specific directions to each office.

### **Memphis**

**Suite E-645 Perimeter Park  
2510 Mount Moriah Road  
Memphis, TN 38115  
Phone: (901) 368-7939  
Fax: (901) 368-7979**

### **Jackson**

**1625 Hollywood Drive  
Jackson, TN 38305  
Phone: (731) 512-1300  
Fax: (731) 661-6283**

### **Columbia**

**2484 Park Plus Drive  
Columbia, TN 38401  
Phone: (931) 380-3371  
Fax: (931) 380-3397**

### **Nashville**

**711 R.S. Gass Boulevard  
Nashville, TN 37243  
Phone: (615) 687-7000  
Fax: (615) 687-7078**

### **Cookeville**

**1221 South Willow Avenue  
Cookeville, TN 38506  
Phone: (931) 432-4015  
Fax: (931) 432-6952**

### **Chattanooga**

**Suite 550—State Office Building  
540 McCallie Avenue  
Chattanooga, TN 37402  
Phone: (423) 634-5745  
Fax: (423) 634-6389**

### **Knoxville**

**3711 Middlebrook Pike  
Knoxville, TN 37921  
Phone: (865) 594-6035  
Fax: (865) 594-6105**

### **Johnson City**

**2305 Silverdale Road  
Johnson City, TN 37601  
Phone: (423) 584-5400  
Fax: (423) 854-5401**

## ENVIRONMENTAL JUSTICE AND TITLE VI

The Environmental Justice Program (EJP) seeks to ensure the full and fair participation by all potentially affected communities in the environmental decision-making process and emphasizes quality of life and environmental protection improvements in all communities.

[www.tn.gov/environment/ea/justice](http://www.tn.gov/environment/ea/justice)

(615) 253-8337

The program ensures compliance with Title VI of the 1964 Civil Rights Act. Title VI states, “No person in the United States shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefit of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” 42 U.S.C. §2000d

We are committed to ensuring that all management, staff, contractors, and service beneficiaries are aware of the provisions of and responsibilities associated with Title VI of the Civil Rights Act of 1964.

- The Department launched a new Environmental Justice website.
- The 2007 East Tennessee Environmental Conference featured a presentation on “Environmental Justice in Tennessee.”
- The program developed extensive Title VI training materials to provide staff and external stakeholders with federal non-discrimination compliance requirements.
- Our Environmental Field Office Directors and Parks and Conservation Division Managers attended Title VI training.
- The program completed a comprehensive Title VI Implementation Plan for TDEC. Key components of the new Environmental Justice Program are a new TDEC written Limited English Proficiency plan meeting federal non-discrimination compliance requirements.

## FLEMING TRAINING CENTER

The Fleming Training Center (FTC) supports Tennessee’s Water Environmental Health Act, providing training, certification, and technical assistance to water and wastewater operators across Tennessee. The FTC has trained over **68,000** operators since the center opened in **1973**.

[www.tn.gov/environment/fleming](http://www.tn.gov/environment/fleming)

(615) 898-8090

FTC has responsibilities in four major areas:

- Conducting training classes and continuing education seminars for water distributors and wastewater collection system operators;
- Administering the Operator Certification Program;
- Conducting basic training and testing backflow prevention devices; and
- Providing technical assistance statewide to water and wastewater operators and facilities.





- In 2007, staff conducted **107** different training classes for to more than 2,300 water and wastewater treatment operators; more than 5,700 student training days. Issues vary from small local systems to systems with more than 100,000 connections.
- Through the Water and Wastewater Operation Certification Board, the FTC serviced over 3,700 certified water and wastewater operators, who hold over **5,380** different licenses. Staff graded more than 1,300 exams and approximately **750** applicants took the two semi-annual certification exams. Application and renewal fees generate approximately **\$192,000** annually.
- Using funding provided by an EPA expense reimbursement grant (ERG), the FTC continued implementation of a statewide program tailored to fit the specialized needs of the small water system operator. FTC added an experienced operator who travels across the state, helping operators on-site with problems faced on a daily basis.
- In 2007, staff assisted with **475** technical inquiries from water and wastewater treatment plant operators across the state, helping them solve compliance problems and run their systems more effectively and efficiently.

## GOVERNOR'S ENVIRONMENTAL STEWARDSHIP AWARDS



Governor's Environmental Stewardship Awards

Many Tennesseans go above and beyond to protect and preserve our natural resources.

[www.tn.gov/environment/awards](http://www.tn.gov/environment/awards)

(615) 253-8780

Through their outstanding actions and commitments, these environmental stewards help to make Tennessee the place we love. Our Department makes it a priority to recognize environmental stewardship through the Governor's Environmental Stewardship Awards.

The Awards Program celebrated its 21st anniversary in 2007. The program honor individuals, groups, and organizations who create the cleaner, healthier Tennessee we all want to see. The recipients demonstrate an excellence in environmental stewardship that excites us about our future. With over 100 nominations received in 2007, the achievements of these thirteen winners reflect the positive vision we have for Tennessee.

Bertha Chrietzberg has been a tireless and effective champion for outdoor recreation and the protection of Tennessee's environment for more than 45 years. She was a founding member of the Tennessee Scenic Rivers Association created in 1966 and the Tennessee Trails Association founded in 1968, Bertha has helped lead many other non-profit, citizen based organizations including the Tennessee Environmental Council, Tennessee Citizens for Wilderness Planning, Friends of Fall Creek Falls, Friends of the Stones River Greenway, the Black Fox Wetland League, the Stones River Watershed Association and the Tennessee Native Plant Society. Her tireless efforts have rescued rare plants, prevented gravel mining in the Stones River, championed the Stones River greenway route, cleaned up toxic dumpsites, and conducted numerous wildflower hikes.

It's amazing what one person can do!



2007 Robert Spark's Walker Lifetime Achievement Award Winner

## 2007 GOVERNOR'S ENVIRONMENTAL STEWARDSHIP AWARD RECIPIENTS



### **Excellence in Agriculture/Forestry**

Raymond Cooper Farm—Grazing Technology for Water Quality  
(Cannon County)

### **Excellence in Aquatic Resource Preservation**

Department of Agriculture Sevenmile Creek—Ellington Restoration Project  
(Davidson County)

### **Excellence in Building Green**

Lawrence Bros., LLC—Morgan Park Place, Phase One  
(Davidson County)

### **Energy Leadership**

City of Johnson City—Iris Glen Gas to Energy Partnership  
(Washington County)

### **Excellence in Environmental Education and Outreach**

Tennessee Valley Earth Partnership—2006 EarthFest  
(Knox County)

### **Green Schools—K-12**

West Carroll Elementary  
(Carroll County)

### **Green Schools—Higher Education**

Middle Tennessee State University—WaterWorks!  
(Rutherford County)

### **Excellence in Greenways and Trails**

Maury County Parks & Recreation—Tony's Trail  
(Maury County)

### **Hazardous Waste Reduction**

Pull-A-Part, LLC  
(Davidson County)

### **Excellence in Natural Heritage Conservation**

Friends of Beaman Park  
(Davidson County)

### **Excellence in Parks and Recreation**

City of Chattanooga—Renaissance Park  
(Hamilton County)

### **Excellence in Pollution Prevention**

SIM from Tricycle, Inc.  
(Hamilton County)



## GROUND WATER PROTECTION

Our Ground Water Protection (GWP) division protects the ground and surface waters of Tennessee by designing and overseeing the installation of small sewage treatment systems in the area without local sewer service. The environmental specialist staff have offices in counties throughout the state, providing service to local citizens, governments, leaders, and developers.

Groundwater Protection staff frequently serve as frontline TDEC representatives in local counties.

[www.tn.gov/environment/gwp](http://www.tn.gov/environment/gwp)

(615) 532-0625

- The updated Groundwater Protection website announced program initiatives and regulatory/policy revisions, providing easier public access to information and resulted in increased public participation.
- Staff participated in workshops across the state with local planning and zoning officials, and real estate groups.
- On-site system installers attended training for conventional and alternative technologies.
- Groundwater Protection partnered with the University of Tennessee to fund the Center for Decentralized Wastewater Management to explore improved wastewater renovation technologies and provide training to state, county, and private parties.
- County employees, system installers and pumpers, home inspectors, and private soil consultants attended training classes at the Fleming Training Center.
- Staff provided Radon brochures to all subsurface sewage service applicants.

## HOUSEHOLD HAZARDOUS WASTE



Household Hazardous Waste (HHW) is any unwanted or spent household product

that ignites easily (flammable), burns or irritates living tissue (corrosive), reacts violently with water or other chemicals (reactive), or is poisonous to humans and animals (toxic). TDEC's Mobile HHW Collection Service goes from county to county every Saturday from mid-March to mid-November providing citizens with no-cost, safe disposal options.

[www.tn.gov/environment/swm/hhw](http://www.tn.gov/environment/swm/hhw)

(615) 532-9265

The program began operation in 1993 and has conducted more than **850** one-day events. Over **226,000** Tennessee families have participated leading to the proper disposal of almost **17 million** pounds of HHW. The Mobile HHW Collection Service is managed by the Problem Waste Section of the Division of Solid Waste Management Waste Management.

In 2007, the Household Hazardous Waste Program held HHW events in 52 counties serving nearly **24,000** households. Approximately **1,791,318** pounds of HHW were collected preventing their disposal at local landfills.





## MERCURY ABATEMENT STRATEGY

**(615) 532-9265**  
or  
**(615) 532-9271**

Improperly using and mishandling mercury leads to environmental and health problems. Tiny droplets of mercury evaporate into the air over time. When mercury is inhaled it enters the blood. Breathing mercury vapors over a long period of time may damage the brain, spinal cord, kidneys, and liver.

### End of Life Vehicle Solutions (ELVS)

Automobiles have electronic switches that contain mercury. To eliminate the risk of improper disposal of these switches, the automobile manufacturers created a non-profit corporation called End of Life Vehicle Solutions (ELVS) to provide educational materials as well as collect and recycle mercury-containing automotive switches at no cost to the automobile dismantler. In April 2007, Tennessee joined this national program to remove and recycle mercury switches from vehicles.

### Mercury Thermometer Swap Program

Mercury thermometers were used for many years by families to monitor temperatures because there were no alternatives. Digital or alcohol-filled thermometers are now available. The Office of Environmental Assistance purchased digital thermometers and non-mercury glass thermometers and conducted mercury thermometer swaps across the state for the past two years to help eliminate the potential for mercury spills in homes.



- The Mobile HHW Program collected nearly **356** pounds of mercury for recovery.
- A total of **620** household and school fever thermometers, containing more than **300** grams of mercury, were swapped through various OEA programs.
- Tennessee's 34 participants in the ELVS program removed **4,546** switches in 2007, preventing the release of **10** pounds of mercury into the environment.

## RADON

[www.tn.gov/environment/ea/radon](http://www.tn.gov/environment/ea/radon)  
**1-800-232-1139**

homeowners, technical information for universities, and specific materials for targeted audiences such as real estate professionals, home builders, building codes officials, home inspectors, and school officials. Radon is a serious problem in Tennessee and every home should be tested.

Because radon is a naturally occurring gas, it is everywhere. When there is not a building trapping the natural upward flow of radon, it disperses through air and causes little harm. However, buildings block this upward flow of radon and build pressure. This allows the radon to seep into them. It moves into homes through cracks, sump pumps, well water supplies, and other openings. All homes and structures are susceptible to radon. It is a myth that only basements or newer homes and buildings are at risk. The type of construction, design, use, and/or age of the structure does not determine radon levels.

The Tennessee Radon Program offers a myriad of services and assistance: test kits for



- Governor Bredesen proclaimed “January as Radon Action Month.”
- A new brochure with radon information and a coupon for a free radon test kit provided a quick and easy tool to the public.
- A new partnership with the American Lung Association – Tennessee Chapter provided new opportunities to promote radon awareness, including the first Lung Fest in Chattanooga.
- More than 1,500 attendees at the Take Time for Health and Clean Air Fairs were informed of the health impacts of radon.
- Over **600** calls to the Tennessee Radon Hotline were answered. As a result, more than **500** test kits and over 600 radon information packets were provided to local citizens.
- Radon staff participated in 6 additional outreach exhibits that reached approximately **28,000** citizens.



## SCHOOL CHEMICAL CLEANOUT CAMPAIGN



OEA, working in partnership with the Division of Solid Waste Management, administers the School Chemical Cleanout Campaign (SC<sub>3</sub>).

The program removes chemical waste from schools ensuring the safety of the students, faculty, and the environment. Since its inception, the program has collected over **35,000** pounds of chemicals including **711** pounds of mercury and mercury-containing devices from **100** schools statewide.

Laboratories are the source of most of the chemicals removed; however, outdated chemicals also come from grounds keeping, maintenance, darkrooms, art classrooms, and shop classes. Grants from the US EPA Region 4 serve as the programs primary

funding sources.

Mercury can be found in many school science classrooms, laboratories, cafeterias and nurse's offices in all types of equipment including thermometers, air pressure gauges, barometers, silent wall switches, and many laboratory apparatuses. The program purchased digital and liquid-filled thermometers to exchange for laboratory and nursing station thermometers.



- In 2007, 18 schools were serviced by the program's vendor, removing over **3,929** pounds of chemicals, including **111** pounds of mercury and mercury-containing devices.
- School were encouraged to participate in a training workshop at the TN Science Teachers Association, emphasizing chemical management, lab safety, Green Chemistry experiments and micro-scale chemistry experiments as alternative teaching methods. All attendees received Green Chemistry teacher and student lab manuals on CD and free supplies for micro-scale chemistry experiments.
- In June 2007, the program was honored at EPA's National Notable Achievement Awards Ceremony, receiving the State Program Team of the Year .

[www.tn.gov/environment/sc3](http://www.tn.gov/environment/sc3)

**(615) 253-5449**

# SMALL BUSINESS ENVIRONMENTAL ASSISTANCE

[www.tn.gov/environment/ea/sbeap](http://www.tn.gov/environment/ea/sbeap)

(615) 532-8012

(800) 734-3619

The Small Business Environmental Assistance Program (SBEAP) provides technical, administrative, and regulatory support for small businesses. The SBEAP staff serve as liaisons between the regulatory agencies and small businesses. The SBEAP provides compliance advice and regulatory interpretation to these businesses helping

them comply with complex environmental rules. Confidentiality is maintained when representing the interest of a small business.

Assistance includes:

- Informing businesses of requirements;
- Maintaining a list of affected industry for information distribution;
- Disseminating up-to-date information to the small business community, including easy to understand public information materials;
- Helping small businesses understand specific technical, administrative, and compliance requirement providing referrals; for complex questions: and



- Providing training opportunities.



- The National Environmental Summit featured a presentation on the program's Environmental Council of States' (ECOS) grant project.
- The EPA Region IV Small Business web based newsletter highlighted the SBEAP's compliance assistance activities.

- The EPA developed a case study of the program's Ready Mixed Concrete facility compliance project. Information and project materials were included in EPA inspector training.
- Staff presented the Ready Mixed Concrete Project at the National Small Business Environmental Assistance Program Conference.
- Reciprocating Internal Combustion Engines (RICE) that are in operation with more than 500 brake horsepower at major sources of hazardous air pollutants emissions or used for emergency power are required to be in compliance by June 15, 2007. The RICE new rule summary and fact sheet web notification assisted small businesses with being in compliance.
- Staff developed an asphalt plant compliance checklist and specialized website.





# STATE EMPLOYEE RECYCLING PROGRAM

By working with vendors and local governments, the State Employee Recycling Program (SERP) provides office paper collection to State offices in Chattanooga, Jackson, Johnson City, Knoxville, Memphis, Nashville, Cookeville, Columbia, Jamestown, and Oak Ridge, serving over 32,000 state employees. Nineteen new facilities were added in 2006 2007 to the 117 locations already taking part in the program. The SERP also promotes plastic and aluminum beverage container recycling where services are available.

Collectively, employees recycle 70.58 tons of office paper per month, saving the State over \$2,109.00 in landfill disposal costs each month as well as the cost for extra dumpsters and compactors. From January 1, 1990 to December 31, 2007 state employees



[www.tn.gov/environment/ea/serp](http://www.tn.gov/environment/ea/serp)

(615) 532-0779



recycled 15,245.5 tons of mixed office paper, which generated \$132,621 in revenue, and eliminated \$455,572 in landfill costs. Revenue is deposited in the Solid Waste Management Fund.

The SERP is a part of the Office of Environmental Assistance. We continually seek new ways to recycle than dispose of solid wastes and commodities to add to the program and we encourage employees to reduce waste. A green cubicle provides recycling and reuse opportunities for TDEC staff including collection points for eye glasses, wire hangers, six-pack rings, compact fluorescent lamps, mercury thermostats, name badge holders, ink jet cartridges, rechargeable batteries, cell phones as well as a book and coupon

- The US EPA recognized the State Employee Recycling Program as the WasteWise State Government Partner of the Year on November 14, 2007, in Washington, D.C. This is the fifth consecutive year TDEC has received this award.
- In 2007, State employees recycled nearly **800** tons of mixed office paper, generating more than **\$16,581 in revenue and eliminating** more than **\$23,968** in landfill disposal costs.
- The SERP participated in the Tennessee Great American Cleanup by hosting a clothing drive at the Bicentennial Mall State Park. Employees from 11 different departments donated over **4,260** pounds of clothes to charity.
- In June 2007, the SERP added beverage container recycling bins to the downtown campus. The response was immediate, aluminum can and plastic bottle collection increased from **240** pounds per month to **1,273** pounds per month. Staff hosted informational booths to explain the program changes and answered recycling questions.
- Collection boxes for rechargeable batteries, mercury containing lamps, ink jet cartridges, and cell phones were added at each of the eight Field Offices to provided field staff with additional recycling opportunities.



**George Kesterson, SERP Coordinator, accepts the WasteWi\$e Award.**

# TENNESSEE POLLUTION PREVENTION PARTNERSHIP

[www.tp3.org](http://www.tp3.org)

(615) 532-0463

This Education and Outreach Program provides technical information and assistance, networking and recognition to schools, businesses, industries, governmental agencies, organizations, and households. We encourage community participation and promote pollution prevention and environmental awareness throughout Tennessee.

The TP3 network educates members that pollution prevention protects the environment, saves money, and improves communities. TP3 is an innovative public/private recognition program that encourages beyond-compliance environmental excellence, involves communities in environmental protection, and focuses on measurable results. At the close of 2007, there were **713 TP3** members.

Green Schools is the largest membership category in TP3, which includes public and private schools as well as colleges, universities, and K-12 schools. The program's goals include increasing environmental education and literacy in Tennessee schools, producing knowledgeable and responsible environmental citizens, and cultivating appreciation of nature and stewardship of the natural world.

- TP3 added **144** new members in 2007. The Green Schools program enrolled **70** schools in 2007, representing **26** percent of the total school membership.
- Many Green Schools received prestigious awards for recycling and environmental initiatives, including the Governor's Award for Excellence in a K-12 School, the Tennessee Recycling Coalition School Recycler of the Year, and Tennessee Eastman's Good Sports Always Recycle Award.
- Project Cents is a successful partnership forged between at the Department of Education and TDEC. Project Cents provides K-12 teachers with environmental education activities for the classroom to support Green Schools projects.
- TDEC and the Department of Education promoted the TP3 Green Schools and School Chemical Cleanout programs at three summer science teacher workshops for grades 6-12 teachers.
- TP3 meetings were held in conjunction with East Tennessee Environmental Conference and with the Tennessee Environmental Council/Tennessee Conservation Voters Summit for a Sustainable TN.

## TENNESSEE POLLUTION PREVENTION PERFORMERS

### Governmental Agencies:

- James H. Quillen VA Medical Center

### Industries:

- Bridgestone/Firestone-Warren County Plant
- Delta Faucet Company of Tennessee
- DENSO Manufacturing Tennessee, Inc.
- DENSO Manufacturing Athens TN, Inc.
- JTEKT Automotive Tennessee-Vonore Corp.
- Marvin Windows and Doors of Tennessee
- Saturn Corporation / GM - Spring Hill Manufacturing Facility

### Schools:

- Centennial High School



# USED OIL PROGRAM

The Used Oil Collection Act of 1993 provides for grants to develop and implement educational programs to encourage proper handling, disposal and recycling of used oil. The Act created the Used Oil Fund that is supported by the \$0.02 per quart fee on oil purchased for vehicles in Tennessee.

The Used Oil Fund supports county used oil collection sites, the used oil hotline(1-800-287-9013), and a range of public education projects and programs for “do it yourselves.” Since 1993, the Used Oil Fund has provided financial assistance to counties, municipalities, and automotive businesses, making used oil recycling easy and convenient.



- Tennessee’s do-it-yourselfers recycle more than **1 million** gallons of used motor oil annually.
- If used oil is not disposed of properly, it can damage the sewer systems and contaminate our groundwater and streams. It takes only one gallon of used oil to contaminate a million gallons of drinking water.
- Recycling used oil takes uses 67 percent less energy than refining crude oil.
- It takes 42 gallons of crude oil, but only 1 gallon of used oil, to produce 2 ½ quarts of new, high-quality lubricating oil.

[www.tn.gov/environment/swm/oil](http://www.tn.gov/environment/swm/oil)

(615) 532-9435

1 (800) 287-9013



- County convenience centers, recycling centers, and the environmental field offices received **3, 252** “Used Oil” labels to encourage proper labeling of oil tanks in accordance with the Standards for the Management of Used Oil.
- Used Oil public address announcements, banners, flyers, booths, and signage at 13 racetracks and 9 minor league baseball parks in Tennessee promoted best management practices and reached nearly 3 million people.
- Three counties began a pilot project using the “Every Drop” system to properly drain and capture residual oil in quart oil bottles making the bottles acceptable for recycling.
- A re-designed Bristol Shuttle Bus promoting recycling used oil brings people from their cars to the racetrack .





## WASTE REDUCTION TASK FORCE

[www.tn.gov/environment/swm/prwr/taskforce.shtml](http://www.tn.gov/environment/swm/prwr/taskforce.shtml)  
(615) 532-0780

The Solid Waste Advisory Committee (SWAC) convened a twenty-three member Waste Reduction Task Force. Task Force Members include solid waste professionals, county, municipal, industry, and environmental representatives who evaluate Tennessee's management of solid waste and recycled material streams and will propose improved methods to reduce, reuse, and recycle municipal solid waste to set future goals and establish methods for measuring the goals.

The Task Force was charged with responsibility to:

1. Develop recommendations for the SWAC for rules, to update, change, or revise the waste; reduction goal for the State;
2. Define the methodology to measure the waste reduction goal; and
3. Develop alternatives to reduce waste.

These three objectives define the parameters and the Task Force mission. The charges listed above are very important to the State and its citizens. This group will provide the map for solid waste management for many years to come.

## WATER INITIATIVES

[www.tn.gov/environment/wpc](http://www.tn.gov/environment/wpc)

The Division of Water Pollution Control administers the Tennessee Water Quality Control Act of 1977. Annually the Division monitors, analyzes, and reports on the quality of Tennessee's water. In addition, a number of specific surveys are conducted, including studies of in-stream biological communities and documentation of contaminant levels in sediment and fish flesh. The fish and bacteriological data generated by the Division are used by the Department to issue advisories to the public when levels of contaminants exceed those considered to be protective of public health.

- TDEC WPC staff participated in several TN MS4 Working Group meetings by presenting information concerning the existing and future NPDES storm water programs. The 2007 East Tennessee Environmental Conference featured presentations on the storm water program.
- Exhibit booths at Nashville's Earth Day, Smyrna's Stewart Creek Waterfest, the Annual Meeting of the Garden Club of Tennessee, and numerous watershed association meetings across the state, helped educate Tennesseans about water quality.
- Staff participated in environmental camps at Burgess Falls and Standing Stone State Parks.
- The US EPA recognized TDEC for its national leadership in the innovative use of EPA's Assessment Database. The database tracks water quality assessment data, including whether rivers, streams and lakes meet their classified uses and if not, the cause and source of stream impairment.



Rich Cochran, Paul Davis, and Deputy Commissioner Paul Sloan accept award from US EPA Assistant Administrator for Water, Ben Grumbles.

## WATERSHED INITIATIVE

A watershed is defined as the land area that drains into a particular stream. Watersheds may be many different shapes or sizes. Everyone lives in a watershed. Tennessee refers to each watershed by a specific name as well as by a specific number. The specific watershed number is the watershed Hydrologic Unit Code (HUC). The HUC ranges from 2 to 16 digits. Fewer digits indicate smaller watersheds.

Watersheds are readily identifiable landscape features with readily specific boundaries incorporating terrestrial, aquatic, and geologic features in one specific area. Focusing on the whole watershed affords the best balance when to control likely point source pollution and polluted runoff practices with protection of drinking water sources and sensitive natural resources such as wetlands.

Four main steps are taken when using the Watershed Approach:

1. Identifying and prioritizing water quality problems in the watershed,
2. Developing increased public involvement,
3. Coordinating activities with other agencies, and
4. Measuring success through increased and more efficient monitoring and other data gathering.



[www.tn.gov/environment/watershedsigns](http://www.tn.gov/environment/watershedsigns)

(615) 532-0625

## WORKING FOR HEALTHIER HOSPITALS



Following a national movement to assist hospitals and other medical facilities with compliance issues and

pollution prevention initiatives, the Office of Environmental Assistance worked with partners to develop materials and provide information to this sector.

The University of Tennessee Center for Industrial Services, the Veteran's Administration Mountain Home facility in Johnson City, and the Veteran's Administration facility in Asheville, NC assisted in hosting a one-day workshop in Morristown, TN. Topics featured at the workshop included energy conservation, water conservation, recycling opportunities, mercury reduction, green cleaning practices and benefits, and the Tennessee Pollution Prevention Partnership.

The workshop was attended by the University of Tennessee Veterinary School, Hendersonville Medical Center, Methodist Medical Center in Oak Ridge, the

University of Tennessee Medical Center, Blount Memorial Hospital in Maryville, Wellmont Health Systems in Kingsport, and the East Tennessee Regional Health Department.

[www.tn.gov/environment/ea/hospitals](http://www.tn.gov/environment/ea/hospitals)

(865) 594-5512



**For More Information Contact:**  
**Tennessee Department of Environment and Conservation**  
**1st Floor L&C Tower**  
**401 Church Street**  
**Nashville, TN 37243**  
**1-888-891-TDEC**  
**Ask.tdec@state.tn.us**  
**www.tdec.net**

